



CERTIFICATE OF ANALYSIS

Product	CITRAL
Batch Number	4352201 FEBRUARY
Best Before End	2022

NATURAL OCCURRENCE	IN LEMON, ORANGE, ETC; ISOLATED FROM LEMONGRASS OIL.
APPEARANCE	CLEAR ,PALE YELLOW LIQUID.(REDISH - YELLOW ON KEEPING).
REF. IND. AT 20° C.	1. 486 TO 1. 490.
OPT.ROTN.	0° / INACTIVE
ASSAY	96 % MIN. G.C.
BOILING PT.	228° C./ ATM.PR.
SP.GR.AT 25° / 25° C.	0. 885 TO 0.891.
ODOUR	STRONG - FRESH, LEMON PEEL LIKE.
FLAVOUR/TASTE	BITTERISH, LEMON PEEL LIKE.
SOLUBILITY	SOLUBLE IN 1: 1 RATIO IN PROPYLENE GLYCOL & MINERAL OIL.
USES	: FLAVOUR AND FRAGRANCE INDUSTRY, PERFUMERY COMPOUND, SOAPS.CANDLES



DECLARATION OF ALLERGENS

PRODUCT	Citral Oil
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MATERIAL	CAS NUMBER	TOTAL ALLERGEN INCLUSION LEVEL (%)
AMYL CINNAMAL	122-40-7	-
BENZYL ALCOHOL	100-51-6	-
CINNAMYL ALCOHOL	104-54-1	-
CITRAL	5392-40-5	96
EUGENOL	97-53-0	-
HYDROXYCITRONELLAL	107-75-5	-
ISO EUGENOL	97-54-1	-
AMYL CINNAMYL ALCOHOL	101-85-9	-
BENZYL SALICYLATE	118-58-1	-
CINNAMAL	104-55-2	-
COUMARIN	91-64-5	-
GERANIOL	106-24-1	-
HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	31906-04-4	-
ANISE ALCOHOL	105-13-5	-
BENZYL CINNAMATE	103-41-3	-
FARNESOL	4602-84-0	-
BUTYLPHENYL METHYLPROPIONAL	80-54-6	-
LINALOOL	78-70-6	-
BENZYL BENZOATE	120-51-4	-
CITRONELLOL	106-22-9	-
HEXYL CINNAMAL	101-86-0	-
LIMONENE	5989-27-5	-
METHYL 2-OCTYNOATE	111-12-6	-
ALPHA-ISOMETHYL IONONE	127-51-5	-
EVERNIA PRUNASTRI EXTRACT	90028-68-5	-
EVERNIA FURFURACEA EXTRACT	90028-67-4	-
		96%



03.01.2019

BREIF MANUFACTURING PROGRESS FLOW CHART

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Manufacturing process of Citral Essential Oils

- harvesting Grass →
- Collecting of Grass , →
- Drying the Grass in sun light →
- **Filling of crushed Seed in Vessel** →
- Steam distillation process start →
- Collection of oil from separator Tank →
- **Filling of Lemon Grass oil in Vessel** →
- Friction distillation process start →
- Collection of oil from Tank →
- Filtration of oil and dirty part. →
- Storage of Oils in drums →
- Testing of lot sample for quality →
- Send to warehouse for sale .



GMO AND VEGAN STATEMENT

Citral Essential Oil(Cymbopogon Citratus)

CUSTOMS TARIFF NO. : 3301.29.00.00

COUNTRY OF ORIGIN : INDIA

We certify that no alcohol or animal derivatives were used during the manufacturing process.

We further certify that it does not contain any chemical, pesticides or alcohol And it is GMO free product.

We confirm that material did not undergo irradiation during any stage of the manufacturing process.

This is also confirm that this oil is suitable for Vegan users.

03.01.2019



IFRA

CITRAL ESSENTIAL OIL

INCI Name :CYMBOPOGON FLEXUOSUS/CITRATUS

We certify that the above compound is in compliance with the standards of the INTERNATIONAL FRAGRANCE ASSOCIATION (IFRA 48TH Amendment), provided it is used in the following class(es) at a maximum concentration level of:

IFRA Class(es) (See Annex for Details)	Max Level of Use (%)
Class 1{(*)}	No Limit{(*)}
Class 2	No Limit
Class 3A	No Limit
Class 3B	No Limit
Class 3C	No Limit
Class 3D	No Limit
Class 4A	No Limit
Class 4B	No Limit
Class 4C	No Limit
Class 4D	No Limit
Class 5	No Limit
Class 6{(*)}	No Limit{(*)}
Class 7A	No Limit
Class 7B	No Limit
Class 8A	No Limit
Class 8B	No Limit
Class 9A	No Limit
Class 9B	No Limit
Class 9C	No Limit
Class IOA	No Limit
Class 10B	No Limit
Class 11	No Limit

(*) IFRA would recommend that any material used to impart perfume or flavour in products intended for human ingestion should consist of ingredients that are in compliance with appropriate regulations for foods and food flavourings.

The IFRA Standards regarding use restrictions are based on safety assessments by the Panel of Experts of the RESEARCH INSTITUTE FOR FRAGRANCE MATERIALS (RIFM) and are enforced by the IFRA Scientific Committee.

Evaluation of individual Fragrance ingredients is made according to the safety standards contained in the relevant section of the IFRA Code of Practice.

It is the ultimate responsibility of our customer to ensure the safety of the final product (containing this fragrance) by further testing if need be.

ANNEX: Definition of IFRA Classes

FINISHED PRODUCT TYPES	IFRA CATEGORY
Lip Products of all types (solid and liquid lipsticks, balms, clear or coloured, etc.), Children's Toys.	Class 1
Deodorant and Antiperspirant Products of all types including any product with Intended or a reasonably foreseeable use on the axillae or labelled as such (spray, stick, roll-on, under-arm, deodorant-cologne and body spray, etc.) Nose Pore Strips. Fragranced Bracelets.	Class 2
Hydroalcoholic Products - Applied to Recently Shaved Skin (includes After Shave)	Class 3A
Hydroalcoholic Products Applied to Recently Shaved Skin (includes After Shave) Fine Fragrance.	Class 3B
Eye Products of all types (eye shadow, mascara, eyeliner, eye make-up, etc.) including eye care. Men's Facial creams and Balms. Baby Creams, Lotions, Oils. Body Paint for Children.	Class 3C
Tampons.	Class 3D
Hydroalcoholic Products applied to unshaved skin (includes aqueous based, alcoholic based and hydroalcoholic) like Cologne, Eau de cologne, Eau de Parfum or Parfum. Ingredients or Perfume Kits. Scent Pads, Foil Packs. Scent Strips for hydroalcoholic products.	Class 4A
Fine Fragrance - Hydroalcoholic Products applied to unshaved skin (includes aqueous based, alcoholic based and hydroalcoholic) like Cologne, eau de cologne, Eau de Parfum or parfum.	Class 4B
Hair Styling Aids, Sprays of all types (pumps, aerosol sprays, etc.) Body Creams, Oils, Lotions of all types (except baby creams, lotions and oils). Body sprays (including Body Mist) with no intended or reasonably foreseeable use on the axillae. Fragrance Compounds for Cosmetic Kits. Foot care products. Hair deodorant.	Class 4C
Body Paint except those for children) fragrance Cream, Solid Perfumes.	Class 4D

Facial Masks. Women's Facial Creams/Facial Make-up, Hand Cream, Hand Sanitizers, Baby Powder and Talc, Hair Permanent and other hair chemical treatments (e.g. relaxers) but not hair dyes, Wipes or Refreshing Tissues for Face, Neck, Hands, Body, Dry Shampoo or Waterless Shampoo.	5(*)
Mouthwash, including Breath Sprays, Toothpaste.	Class 6
Intimate Wipes, Baby Wipes.	Class 7A
Insect Repellent (intended to be applied to skin).	Class 7B
Make-up Removers of all types (not including face cleansers). Hair Styling Aids Non-Spray of all types (mousse, gels, leave-conditioners, etc.), Nail Care, Powders and talc's, all types (except baby powder and talc's)	Class 8A
Hair Dyes	Class 8B
Conditioner (Rinse-Off), Liquid Soap, Shampoos of all types (including baby shampoos), Face Cleansers of all types (washes, gels, scrubs, etc.). Shaving Creams of all types (stick, gels, foams, etc.), All Depilatories (including waxes for mechanical hair removal), Body Washes of all types (including baby washes) and Shower Gels of all types, Bar Soap (Toilet Soap), Bath Gels, Foams, Mousses, Salts, Oils and Other Products added to bathwater.	Class 9A
Feminine hygiene - pads, liners, Toilet paper, Wheat bags.	Class 9B
Facial tissues, Napkins, Paper towels, Other Aerosols (including air freshener sprays and air freshener pump sprays, but not including deodorants/antiperspirants, hair styling aids/sprays	Class 9C
Hand wash Laundry Detergents of all types including concentrates, Fabric Softeners of all types including fabric softener sheets, household Cleaning Products, Other Types (fabric cleaners, soft surface cleaners, carpet cleaners, etc.) Machine Wash Laundry Detergents (liquids, powders, tablets, etc.) including laundry bleach and concentrates, Hand Dishwashing Detergent including concentrates, Hard Surface Cleaners of all types (bathroom and kitchen cleansers, furniture polish, etc.), Shampoos for pets, Dry cleaning kits, Scented gloves, socks, tights with moisturisers.	Class 10A
Diapers, Toilet seat wipes.	Class 10B

<p>All non-skin contact or incidental skin contact including: Candles, Air Fresheners and Fragrance of all types (concentrated aerosol with metered doses (range 0.05-0.8ml/spray), plug-ins, solid substrate, membrane delivery, electrical), Air Delivery Systems, Cell Phone Cases, Pot pourri, powders, fragrance sachets, liquid refills for air fresheners (non-cartridge systems), Reed diffusers, Liquid refills for air fresheners (cartridge systems), Shoe Polishes, Deodorisers/Maskers not intended for skin contact (e.g. fabric drying machine deodorisers, carpet powders), Insecticides (mosquito coil, paper, electrical for clothing etc.) excluding aerosols, Scent delivery system using a dry air technology that releases a fragrance without sprays, aerosols or heated oils (technology of nebulisation), Air freshening crystals, Toilet Blocks, Joss Sticks or Incense Sticks, Machine-only wash Detergent and Deodorisers, Machine-only Laundry Detergent (e.g. Liquitabs)**, Plastic articles (excluding toys), Fuels, Fragranced lamp ring, Scratch and Sniff (sampling technology), Paints, Cat Litter, Animal Sprays (all types), Treatment products for textiles (e.g. starch sprays, fabric treated with fragrances after wash, deodorisers for textiles or fabrics), Floor Wax, Odoured Distilled Water (that can be added to steam irons).</p>	<p>Class 11</p>
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*Class 5, Facial Masks: There are several types of mask: peel off (similar to rinse-off, rinse off and leave-on (you only remove the excess with facial tissue). To ease the split the most restrictive, i.e. leave-on is applied for all.

**Liquitabs corresponds to a dose of liquids wrapped in a film: no contact with hands is expected under normal conditions of use.

The table was prepared with the intention to cover the vast majority of the products; however, it may not cover some specific applications. In this case other classes may be attributed bases on a specific risk assessment.



MATERIAL SAFETY DATA SHEET

Citral Essential Oil

1. PRODUCT IDENTIFICATION

Product Name: CITRAL

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 5392-40-5

FEMA #: 2303 HTC #: 2912.19.1000

3. HAZARD IDENTIFICATION

•HMIS Classification

Health: 0

Flammability: 1

Reactivity: 0

4. EMERGENCY AND FIRST AID PROCEDURES

•Inhalation: If headache, nausea, or drowsiness occurs, remove to fresh air and consult a physician.

•Eye Contact: Remove contact lenses.

Flush eyes with cool water for at least 15 minutes. If irritation persists, consult a physician.

•Skin Contact: Remove contaminated clothing and shoes. Wash affected area thoroughly with soap and water. Consult a physician if symptoms persist.

•Ingestion: If conscious and can swallow, give water to dilute and consult a physician or poison control center immediately.

5. FIRE FIGHTING MEASURES

•Flash Point: 95°C

•Recommended Extinguishing Media :

Foam

Dry Chemical

Carbon Dioxide

Water Fog

•Recommended Fire Fighting Procedure: Wear self-contained breathing apparatus and full protective clothing when fighting fires involving chemicals. Prevent Contact with skin and eyes. Use water spray to cool containers exposed to fire.

•Development of hazardous combustion gases or vapors possible in the event of fire.

•Special Risks, if applicable: Combustible liquid.



6.ACCIDENTAL RELEASE MEASURES

Procedures in Case of Accidental

Release, Breakage or Leakage: Remove any source of ignition. If in confined area, use NIOSH approved respiratory protection and other protective equipment.

Absorb the spilled material with vermiculite or other absorbent material.
Avoid inhaling vapor.

Avoid contact with skin, eyes and clothing. Dispose of material in accordance with local, state, and federal laws and regulations.

7.HANDLING AND STORAGE

- Handling: Avoid breathing vapors. Avoid contact with skin, eyes and clothing.
- Storage:

Store in full sealed containers in cool, dry, ventilated place away from sources of ignition.
Keep containers upright and tightly closed when not in use.

8.EXPOSURE CONTROLS/PROTECTION INFORMATION

- Ventilation Protection: Ventilation meeting ACGIH standards should be employed.
- Respiratory Protection: Respiratory protection is normally not required in well ventilated area.
- Eye Protection: Eye protection should be worn at all times.
- Skin Protection: Chemical resistant gloves are recommended.
- Others: Use protective clothing as necessary.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Color : Clear, colorless to pale yellowish liquid.

Odor Description : Strong, lemon odor

Refractive Index : N/A

Specific Gravity : 0.880 @ 20 °C

Boiling Point : 228 °C

Melting Point : N/A

Solubility : Insoluble in water

Vapor Pressure : N/A

Vapor Density (Air=1) : N/A

biOrigins, 19-20 Sandheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK

Tel: 01425 655555 Email: technical@madarcorporation.co.uk



10. STABILITY AND REACTIVITY

- Protect from light and air.
- Avoid sources of ignition.
- Avoid contact with strong acids, alkali or oxidizing agents.
- Usually stable.

11. TOXICOLOGICAL INFORMATION

- Oral LD50 (rat): 4,960 mg/kg
- Dermal LD50 (rabbit): 2,250 mg/kg
- Inhalation LC50: None established

12. ECOLOGICAL INFORMATION

- Do not allow to enter water, waste water or soil.

13. DISPOSAL CONSIDERATIONS

- Dispose of in accordance with state, local and federal regulations.

14. TRANSPORT INFORMATION

- Ground Shipping (USDOT): Not regulated
- Air shipping (IATA): Not regulated
- Ocean Shipping (IMDG): Not regulated

15. REGULATORY INFORMATION

- This substance contains no materials subject to the reporting requirements of Superfund Amendments and Reauthorization Act of 1986 Title III Section 313.

16. OTHER INFORMATION

• Disclaimer

: The information in this MSDS was obtained from current and reliable sources. However the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. It is the user's responsibility both to determine safe conditions for use of this product and to assume liability for loss, injury, damage, or, expense resulting from improper use of this product.



SPECIFICATION SHEET CITRAL OIL

NATURAL OCCURRENCE	IN LEMON, ORANGE, ETC; ISOLATED FROM LEMONGRASS OIL.
APPEARANCE	CLEAR ,PALE YELLOW LIQUID.(REDISH – YELLOW ON KEEPING).
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OPT.ROTN.	0° / INACTIVE
ASSAY	96 % MIN. G.C.
BOILING PT.	228° C/ ATM.PR.
SP.GR.AT 25° / 25° C.	0. 885 TO 0.891.
ODOUR	STRONG – FRESH, LEMON PEEL LIKE.
FLAVOUR / TASTE	BITTERISH, LEMON PEEL LIKE.
SOLUBILITY	SOLUBLE IN 1:1 RATIO IN PROPYLENE GLYCOL & MINERAL OIL.
USES	: FLAVOUR AND FRAGRANCE INDUSTRY, PERFUMERY COMPOUND, SOAPS.CANDLES

IN THE OPINION OF THE UNDERSIGNED THE SAMPLE COLLECTED FROM PRODUCTION UNIT IS COMPLIES WITH ABOVE SPECIFICATIONS/INTERNATIONAL STANDARD QUALITY.